[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-0900; Directorate Identifier 2015-NE-12-AD; Amendment

39-18251; AD 2015-17-18]

RIN 2120-AA64

Airworthiness Directives; Turbomeca S.A. Turboshaft Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain

Turbomeca S.A. Arrius 2F turboshaft engines with a certain part number oil pump installed. This AD requires inspection, and if necessary, replacement before further flight of the oil pump driver assembly and/or the oil pump shaft, or the oil pump itself. This AD was prompted by cases of deterioration of the gas generator front bearing due to a link loss between the pump driver and the oil pump shaft. We are issuing this AD to prevent link loss between the pump driver and the oil pump shaft, which could lead to an engine in-flight shutdown, forced landing, and damage to the helicopter.

DATES: This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this AD, contact Turbomeca S.A., 40220 Tarnos, France; phone: 33 (0)5 59 74 40 00; telex: 570 042; fax: 33 (0)5 59 74 45 15. You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125. It is also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-0900.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-0900; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Philip Haberlen, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7770; fax: 781-238-7199; email: philip.haberlen@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to the specified products. The NPRM was published in the Federal Register on May 21, 2015 (80 FR 29224). The NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

A risk of an in-flight shutdown (IFSD) has been identified on an ARRIUS 2F engine, due to deterioration of gas generator front bearing. This could be the result of lack of lubrication, due to a link loss between pump driver and oil pump shaft.

This condition, if not detected and corrected, could lead to cases of IFSD, possibly resulting in forced landing with consequent damage to the helicopter and injury to occupants.

Related Service Information under 1 CFR Part 51

Turbomeca S.A. has issued Mandatory Service Bulletin (MSB) No. 319 79 4834, Version B, dated October 21, 2014. The MSB describes procedures for inspecting the oil pump driver assembly on the oil pump shaft, the pump driver splines, and the oil pump splines. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this AD.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (80 FR 29224, May 21, 2015).

Conclusion

We reviewed the available data and determined that air safety and the public interest require adopting this AD as proposed.

Costs of Compliance

We estimate that this AD affects about 96 engines installed on helicopters of U.S. registry. We also estimate that it would take about two hours per engine to comply with this AD. The average labor rate is \$85 per hour. Required parts would cost about \$17,312 per engine. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$1,678,272.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2015-17-18 Turbomeca S.A.: Amendment 39-18251; Docket No. FAA-2015-0900; Directorate Identifier 2015-NE-12-AD.

(a) Effective Date

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Turbomeca S.A. Arrius 2F turboshaft engines with oil pump, part number (P/N) 0319155050, installed, except for:

- (1) Engines, equipped with an oil pump, P/N 0319155050, that were overhauled in a Turbomeca repair center after January 1, 2013, and
- (2) Engines with a serial number of 34776 or higher, provided that the oil pump was not replaced on that engine since the first flight of that engine on a helicopter.

(d) Reason

This AD was prompted by cases of deterioration of the gas generator front bearing due to a link loss between the pump driver and the oil pump shaft. We are issuing this AD to prevent link loss between the pump driver and the oil pump shaft, which could lead to an engine in-flight shutdown, forced landing, and damage to the helicopter.

(e) Actions and Compliance

Comply with this AD within the compliance times specified, unless already done.

- (1) Inspect the pump driver assembly on the oil pump shaft, the pump driver splines, and the oil pump splines, using paragraph 2.4.2, Operating Instructions, of Turbomeca S.A. Mandatory Service Bulletin (MSB) No. 319 79 4834, Version B, dated October 21, 2014, as follows:
- (i) For engines with fewer than 250 engine hours (EH), accumulated since new, since last overhaul, or since last installation of an affected oil pump, whichever occurred later, inspect before exceeding 300 EH, accumulated since new, since last overhaul, or since last installation of an affected oil pump, as applicable.
- (ii) For engines with 250 EH or more, but fewer than 300 EH, accumulated since new, since last overhaul, or since last installation of an affected oil pump, whichever occurred later, inspect within 50 EH.
- (iii) For engines with 300 EH or more, but fewer than 800 EH, accumulated since new, since last overhaul, or since last installation of an affected oil pump, whichever occurred later, inspect within 100 EH.
- (iv) For engines with 800 EH or more, accumulated since new, since last overhaul, or since last installation of an affected oil pump, whichever occurred later, inspect during the next scheduled 500 EH inspection.

- (2) If any oil pump drive assembly and/or oil pump shaft, or the oil pump itself, fails the inspection required by this AD, then before further flight, replace the failed part(s) with part(s) eligible for installation.
- (3) The instruction to report inspection results and the instruction to return a compliance certificate to Turbomeca S.A. as stated in paragraph 2.4.2, Operating Instructions, of Turbomeca S.A. MSB No. 319 79 4834, Version B, dated October 21, 2014, are not required by this AD.

(f) Credit for Previous Action

If you inspected the oil pump driver assembly on the oil pump shaft, the pump driver splines, and the oil pump splines, and replaced any part(s) with part(s) eligible for installation before the effective date of this AD in accordance with Turbomeca S.A. MSB No. 319 79 4834, Version A, dated November 25, 2013, you met the requirements of this AD.

(g) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request. You may email your request to: ANE-AD-AMOC@faa.gov.

(h) Related Information

- (1) For more information about this AD, contact Philip Haberlen, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7770; fax: 781-238-7199; email: philip.haberlen@faa.gov.
- (2) Refer to MCAI European Aviation Safety Agency AD 2015-0049, dated March 17, 2015 (Corrected May 7, 2015), for more information. You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov/#!documentDetail;D=FAA-2015-0900-0002.

(i) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference

(IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR

part 51.

(2) You must use this service information as applicable to do the actions required

by this AD, unless the AD specifies otherwise.

(i) Turbomeca S.A. MSB No. 319 79 4834, Version B, dated October 21, 2014.

(ii) Reserved.

(3) For service information identified in this proposed AD, contact Turbomeca,

S.A., 40220 Tarnos, France; phone: 33 (0)5 59 74 40 00; telex: 570 042; fax: 33 (0)5 59

74 45 15.

(4) You may view this service information at the FAA, Engine & Propeller

Directorate, 12 New England Executive Park, Burlington, MA. For information on the

availability of this material at the FAA, call 781-238-7125.

(5) You may view this service information at the National Archives and Records

Administration (NARA). For information on the availability of this material at NARA,

call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-

locations.html.

Issued in Burlington, Massachusetts, on August 17, 2015.

Diane S. Romanosky,

Acting Directorate Manager, Engine & Propeller Directorate,

Aircraft Certification Service.

[FR Doc. 2015-21202 Filed: 8/27/2015 08:45 am; Publication Date: 8/28/2015]

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